

July 2015

Sedgwick County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 37 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sedgwick County economy.¹ These 37 sectors have a total direct output of approximately \$2012 million and support 6,212.2 jobs in Sedgwick County. Running the model for all 37 sectors simultaneously produces the following results:

Agriculture Contribution in Sedgwick County

Impact Type ²	Employment	% of Total Employment	Total Value Added ³	% of Gross Regional Product ⁴	Output ⁵	% of Gross Regional Product
Direct Effect	6,212.2	2%	\$442,099,409	2%	\$2,011,889,048	8%
Indirect Effect	2,502.0	1%	\$240,405,915	1%	\$411,729,395	2%
Induced Effect	2,472.2	1%	\$178,681,684	1%	\$307,062,417	1%
Total Effect	11,186.4	4%	\$861,187,007	3%	\$2,730,680,860	11%

As shown in the above table, agriculture, food, and food processing supports 11,186.4 jobs, or 4% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$2731 million, roughly 11% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 37 agriculture, food, and food processing sectors is approximately \$861 million, or 3% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 3% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Meat processed from carcasses is the top employer in the agriculture industry with 1,222.2 employees. This table also shows the amount of jobs that are created by the agriculture industry in Sedgwick County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Meat processed from carcasses	1,222.2	\$616,344,170
Landscape and horticultural services	1,050.2	\$74,864,253
Lawn and garden equipment manufacturing	644.4	\$315,090,225
Veterinary services	623.1	\$43,467,532
Grain farming	522.5	\$95,176,252
Wholesale trade.....	476.8	\$111,671,293
Bread and bakery product, except frozen, manufacturing	421.2	\$49,254,412
All other industrial machinery manufacturing.....	369.8	\$100,931,000
Support activities for agriculture and forestry	331.2	\$23,529,527
All other crop farming.....	232.5	\$15,350,437

The Meat processed from carcasses industry directly contributes approximately \$616 million to Sedgwick County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Meat processed from carcasses	1,222.2	\$616,344,170
Lawn and garden equipment manufacturing	644.4	\$315,090,225
Flour milling.....	167.7	\$257,710,448
Wholesale trade.....	476.8	\$111,671,293
All other industrial machinery manufacturing.....	369.8	\$100,931,000
Grain farming	522.5	\$95,176,252
Bottled and canned soft drinks & water.....	110.7	\$90,155,758
Fluid milk manufacturing.....	113.0	\$87,406,623
Landscape and horticultural services	1,050.2	\$74,864,253
Animal, except poultry, slaughtering.....	108.2	\$72,184,879

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Sedgwick County's economy.

Sector Description:	Employment	Output
Oilseed farming	30.3	\$34,182,301
Grain farming.....	522.5	\$95,176,252
Vegetable and melon farming.....	2.2	\$223,981
Tree nut farming.....	0.2	\$35,698
Greenhouse, nursery, and floriculture production.....	40.7	\$3,733,170
Cotton farming	0.9	\$123,568
All other crop farming.....	232.5	\$15,350,437
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming.....	198.2	\$26,712,083
Dairy cattle and milk production	73.9	\$7,155,568
Poultry and egg production	0.8	\$201,274
Animal production, except cattle and poultry and eggs	24.4	\$1,286,945
Commercial logging	25.2	\$1,532,122
Flour milling.....	167.7	\$257,710,448
Confectionery manufacturing from purchased chocolate	11.2	\$3,908,091
Canned fruits and vegetables manufacturing.....	5.6	\$2,705,500
Canned specialties.....	26.1	\$20,174,023
Dehydrated food products manufacturing.....	1.4	\$712,673
Fluid milk manufacturing.....	113.0	\$87,406,623
Animal, except poultry, slaughtering.....	108.2	\$72,184,879
Meat processed from carcasses	1,222.2	\$616,344,170
Poultry processing.....	11.7	\$3,098,796
Bread and bakery product, except frozen, manufacturing.....	421.2	\$49,254,412
Frozen cakes and other pastries manufacturing.....	19.3	\$2,802,111
Cookie and cracker manufacturing.....	11.5	\$4,102,577
Dry pasta, mixes, and dough manufacturing	37.3	\$27,720,285
Tortilla manufacturing	3.8	\$797,872
Coffee and tea manufacturing	20.0	\$14,534,880
Spice and extract manufacturing.....	32.7	\$18,756,233
All other food manufacturing.....	30.5	\$10,346,093
Bottled and canned soft drinks & water	110.7	\$90,155,758
Breweries.....	1.8	\$1,720,153
Farm machinery and equipment manufacturing	6.2	\$4,121,644
Lawn and garden equipment manufacturing	644.4	\$315,090,225
Food product machinery manufacturing.....	10.5	\$3,265,418
All other industrial machinery manufacturing	369.8	\$100,931,000
Veterinary services.....	623.1	\$43,467,532
Landscape and horticultural services.....	1,050.2	\$74,864,253
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All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.